

REVIEWS.

ART. XIV. *On a Peculiar Form of Hæmorrhage from the Uterus.* By ROBERT GOOCH, M. D. *

THE subject of uterine hæmorrhage; though, often discussed, is far from being exhausted; much difference of sentiment still existing as to the best mode of treating it. This arises principally from two causes; namely, 1st, an imperfect acquaintance with what is essential in the uterus itself for the stopping of inordinate flows of blood from its cavity after delivery; and 2d, to the diversity of opinion as to the nature and causes of this discharge, and consequently, as to its mode of treatment.

It is not our purpose on the present occasion to enter minutely into the consideration of uterine hæmorrhage, but to inquire into the peculiarity of that form of it recently described by a distinguished London practitioner; and we think that we shall be able to prove that the *peculiarity* spoken of was the consequence of the neglect of taking advantage of a well-known principle in the economy of the uterus after delivery, to give security against flooding; namely, exciting the “tonic contraction of the uterus.”

“Hæmorrhage from the uterus, after delivery,” says Dr. Gooch, “is attributed to insufficient contraction of that organ. We infer there is no danger of hæmorrhage if the uterus is contracted; and that the uterus is contracted, if it feels small, round, and firm. *This I believe to be generally the truth;* yet the observing practitioner must have been frequently struck by the little proportion that existed between the want of contraction and the degree of hæmorrhage; having found the uterus bulky without any hæmorrhage, and a profuse hæmorrhage without greater bulk of uterus. Nay, further, I have witnessed a profuse hæmorrhage though the uterus had contracted in the degree which commonly indicates security; and I have ventured to do what is seldom justifiable, separate the placenta before the uterus had contracted, without more hæmorrhage than after a common labour.” p. 344.

These are certainly most extraordinary sentiments, and utterly at variance with the best established principles in obstetrics; exhibiting

* See “An Account of some of the most important Diseases peculiar to Women.” By Robert Gooch, M. D. Londoo, 1829. Chap. V.

the greatest want of discrimination in regard to the different conditions of the uterus; and the most dangerous deviation from sound practice. Thus Dr. Gooch at once calls in question, or attempts to render doubtful the controlling power of *contraction* in arresting hæmorrhage after delivery, and seems to declare, that it is not always to be relied upon; than which, there cannot be a greater or more dangerous error; since it would lead the young practitioner to abandon the means of producing it, or make him employ such as are neither certain, nor always justifiable.

Now, we must insist, and the fact is never to be lost sight of, that the security of the woman after delivery depends altogether upon the "*perfection*," and the *degree* of that contraction of the uterus called its "*tonic contraction*." The belief therefore of Dr. G. that he had met with some peculiar hæmorrhages, arises from his not determining the consequences or effects of the different degrees of this effort; and not in reality because there was any peculiarity in the condition of the uterus, as the question, ("what is the circumstance which has such great influence that its presence can cause a moderately contracted uterus to bleed profusely, and its absence can cause an uncontracted uterus to bleed scarcely at all?") would seem to imply. For certainly this question can be answered without having recourse to any operating occult cause, by merely bringing into view, the simplest and most common laws of this organ after delivery; and we are most unfeignedly surprised, that Dr. G. should find it necessary to ask this question; and still more, that he was not able to answer it, *sur le champs*. It is true he has attempted this, but far from satisfactorily, by referring to the state of the circulation, instead of the condition of the placenta and the uterus.

We will therefore attempt the explanation of this apparently puzzling question for Dr. G. In doing this, it will be necessary, briefly, to call to mind the laws which govern the uterus in the expulsion of the placenta, and in the prevention of hæmorrhage, after delivery. First. That a healthy degree of the tonic contraction* is essential to the separation of the placenta; and the quantity of blood poured out after its

* By "*tonic contraction*," we are to understand the exercise of that power by which the reduction of the uterus is effected, even to its original size or state, after it has been emptied, in part or altogether, of its contents, a power inherent in the uterus itself; its action is uniform and constant, in the normal condition of this organ; and its immediate effect is, to diminish the flow of blood from the extremities of the vessels, exposed by the separation of the placenta, either in part, or altogether, by compressing or folding them up; and expe-

separation, will be in proportion to the degree of that separation, and the force of this contraction. Secondly. That on the degree of contraction, will the safety or danger of the woman depend. Thirdly. That this degree can only be determined by the quantity of blood that may be discharged, after the separation of the placenta, and not with certainty by the bulk of the uterus itself, as this will be necessarily modified in a degree, by the bulk of the placenta and its presence within the cavity of the uterus; for it will be at once evident, that if the placenta be thrown altogether, or even partially into the vagina, that the size of the uterus will be less, by so much; and on the other hand, that this organ will be augmented by the presence of the placenta, in the exact proportion to its size; and all this may happen without the precise degree of contraction being determined. Fourthly. That if the placenta preserve its attachment to the uterus, there will be no hæmorrhage, so long as this state of things remain, be the size of the uterus what it may, or however small the degree of contraction; or if it be partially separated, there will be only a commensurate discharge of blood, even if there be no contraction; and less, if there be contraction. Hence, on the one hand, there may be no hæmorrhage, in the first supposition, though the uterus remain uncontracted; in the second, only a very moderate degree of it; and in the third, the quantity (*exteris paribus*,) may be even less than in the second.

Now we think that these several conditions of the placenta and the uterus, will satisfactorily account for the difference or disparity

rience has uniformly proved, that in proportion to the degree and permanency of this contraction, will be the security against flooding; that when it acts in its best manner, (which may be known by its *permanent hardness, and much diminished size*,) the security is complete; and vice versa. That in some cases, this power is lost for a time altogether; or it may be very much diminished; and in either case, the discharge may be great, or even excessive, provided there be a separation of the placenta. That this power may cease to act for a time; the uterus will then be relaxed; and that this cessation of contraction very often does take place, even after the most perfect previous contraction, in which case, hæmorrhage will necessarily ensue; but it may be instantly stopped, by the tonic contraction renewing itself, and all this may happen without our being able to detect the cause. And further; that when this contraction is either reluctant or tardy, it may always be renewed or promoted by frictions upon the abdomen; and lastly, no flooding is ever permanently arrested, but by the influence of this power; and that all the *means* employed for the purpose of arresting uterine hæmorrhage, however diversified they may be, are, and can only be effectual, through the agency of the "tonic power" of the uterus.

which Dr. G. insists sometimes exists between the degree of hæmorrhagy and the want of contraetion, without having recourse to any unusual or oeeult cause operating to this end; and especially, without our abandoning the wholesome and well-tested axiom, that, in proportion to the tonic contraction of the uterus, and the extent of separation of the placenta, will be the discharge of blood from the uterine cavity. Nay, we may even inelude those eases in which there is an entire separation of the placenta, as serving to illustrate the position just laid down; and as explaining certain instances of hæmorrhagy in which there is a greater flow of blood under preeisely the same degree of uterine contraetion, as well as such as are attended with but moderate losses, where there is even less than ordinary contraetion; as the degree of bleeding from the exposed surfacee of the womb, will necessarily be influeneed by the extent of such surfacee, independently and abstractedly—thus, a small-sized plaeenta, when entirely detaeched, will expose a less surfacee than a large one; and consequently will give rise to less hæmorrhage, with exaetly the same force of contraetion—henee in twin eases, or more numerous produets, there will be a greater discharege of blood immediately after delivery, and it will be of much longer continuance subsequently; and consequently a greater risk of hæmorrhage with the same precise degree of contraetion.

Therefore, from a knowledge of these facts, we cease to be surprized, while we admit the truth of the observation, that the practitioner may be frequently struk by the little proportion that “exists sometimes between the want of contraetion and the degree of hæmorrhage; finding the uterus bulky without any hæmorrhage, and a profuse hæmorrhage, without greater bulk of uterus.” For, that this occurs, we readily confess; but at the same time we find no difficulty in its explanation, as may be easily collected from what we have just said; but that it should have chal lenged the wonder of Dr. G. for an instant, we are truly surprized, as no phenomena are of easier solution, especially to those who are attentive, or are acquainted with the laws of uterine contraetion, and its effects, after the expulsion of the child.

But all this would in itself be but a trifle, had it not led Dr. G. to a practiee, whieh, agreeably to his own confession, “is seldom justifiable;” namely, separating “the plaeenta before the uterus had contraeted;” a practiee at once rash, as well as dangerous. It is rash because it is unnecessarily incurring a risk—for risk there is, and this very great, if this operation be performed in the atonic state of

the uterus, which Dr. G. himself declares was the case; at least it was before the uterus had contracted. It is true, that Dr. G. says this was done, "without more hæmorrhage than after a common labour." But does not this declaration increase, rather than diminish the evil, since it conveys the idea that this practice is without danger? Is not Dr. G.'s practice in such cases a sufficient guarantee to the young practitioner for following his example? For we must insist, that it is not sufficient to the best purposes of practice, that the plan pursued by Dr. G. was not attended by "more hæmorrhage than after a common labour;" for this was accidental; it is exceedingly hazardous—for we must again declare, and it cannot be too often repeated, that there is no security against hæmorrhage after delivery, but from the efficient contraction of the uterus.

We can readily imagine, that the practice of "separating the placenta before the uterus was contracted," may not always be followed by dangerous consequences—for the irritation of separating the placenta in these cases, most probably caused the contraction of the uterus, and thus prevented the mischief so heedlessly invited by this mal-practice; for certainly it has always been, and always will be bad practice to make a bleeding surface of the uterus, by separating the placenta from it, before the power, by which danger is averted, has been called into action. This practice appears to be the more reprehensible, as Dr. G. assigns no reason, nor relates any circumstance to justify this departure from well-established rules. Now, we will appeal to the candour of any one, and ask, whether a young practitioner would not be tempted to imitate the practice of a gentleman who is so favourably known to the profession as Dr. G.? and whether he would not be leniently dealt by, should an untoward accident follow the adoption of this plan, did he urge Dr. G. as his authority?

Again; there is much ambiguity in the following practical result, though evidently intended to convey an idea of the uncertainty or uselessness of uterine contraction under certain conditions of the system. Dr. G. observes, "I have observed a profuse hæmorrhage though the uterus had contracted in the degree which commonly indicates security." Now, it should ever be remembered, that no degree of contraction, which is insufficient to prevent or put a stop to hæmorrhage, should be considered as indicative of security. For no absolute reliance can be placed upon the mere size of the uterus after delivery to prevent or interrupt hæmorrhage—we must exclusively depend upon the *effect* of the contraction of the uterus, without the least regard to its volume; for it is of no possible moment, however great the bulk of the uterus may be, if no hæmorrhage be present,

and the reverse. Therefore the young practitioner is cautioned against placing entire reliance upon the mere bulk of the uterus—for we have shown above, the reason why hæmorrhage may not be present, though the uterus remain uncontracted; and why it may be profuse under only a certain degree of contraction; and also why that degree, under certain other circumstances, gives security.

Dr. Gooch was led to the observations we have just commented upon, in order to introduce a *novel* state of things in obstetrics; one, as he supposes, that had hitherto escaped the observation of other practitioners, but which we cannot help believing had been noticed from time immemorial, though not perhaps specifically urged.

He says:—

“After delivery, the contraction of the uterus prevents hæmorrhage by occasioning a sufficient closure of the blood-vessels to resist the ordinary force of the circulation. It appears reasonable to suppose, however, that if the force of the circulation was extraordinarily great, it would be able to overcome the ordinary closure of the orifices, and that thus a profuse hæmorrhage might arise though the uterus was contracted in the ordinary degree.” p. 345.

In this passage we admit, that Dr. G. states circumstances that actually do occur—namely, that a profuse hæmorrhage may take place though the uterus be contracted in an ordinary degree; provided “the circulation is extraordinarily great;” this we admit, though we cannot yield to Dr. Gooch’s explanation of this fact. Dr. G. supposes that the force or velocity of the circulation, overcomes the resistance ordinarily offered by the contraction of the uterus and thus causes flooding. Now, we do not think any degree of force that the circulatory system may possess, is sufficient to overcome the resistance caused by uterine contraction; for the tonic power, if healthfully exerted, is superior to the *vis a tergo* of the blood-vessels within the uterine parietes. The reasons for such dissent are, 1st, that the *vis a tergo*, however powerfully exerted, must necessarily be inferior to uterine contraction, or we should never fail to have hæmorrhages from the uterus, as the circulation is almost always very much augmented by the circumstances of labour itself—yet this accident is comparatively of rare occurrence. 2d. Because hæmorrhage seldom or never takes place in cases even where the greatest possible velocity is given to the circulation, as in hysteritis and peritonitis—indeed, in these cases an entire suppression, or at least a great diminution of discharge, is a common symptom in both these diseases.

We have, however, admitted that under a very brisk excitement of the system a more than ordinary flow of blood may take place,

and we still grant this may happen—but we would account for it in a different way. 1st. That when the circulation is much augmented, the whole system may be considered as being in an abnormal state; and that under such circumstances uterine contraction may be either directly or indirectly less intense than in a state of perfect health—directly, by not contracting as it is wont to do under favourable circumstances, and thus leaving the vessels completely patulous—indirectly, by the vessels terminating upon the internal face of the uterus being more than ordinarily large, and consequently requiring a more than ordinary degree of force to compress them, but which the uterus cannot exert from its not being in a perfectly healthy condition; and consequently, they will continue to pour out a more than ordinary quantity of blood. 2d. That under such condition of the system, hæmorrhage may take place, though the uterus be contracted in the ordinary degree; for the increase of velocity of the blood, will perhaps more than compensate for the diminution of the calibres of the vessels; therefore, more will be transmitted through these vessels in a given time; and this in some instances may amount to a flooding. But in neither of these cases do we see that *the force of circulation overcomes the ordinary degree of contraction.*

Dr. Gooch relates several cases, which he thinks prove the “peculiar form of hæmorrhage” for which he is contending; but in which we can discover nothing but the most ordinary form of this disease. We shall therefore attempt to sustain our position by analyzing these cases.

He informs us that he delivered a lady of her second child, who previously to labour was much flushed, and “had a very full quick pulse.” An antiphlogistic regimen was observed, and she was purged by saline medicine—this diminished but did not subdue this state of circulation, and “it continued in a considerable degree when the child was born.” The child was expelled very gradually; “and after the removal of the placenta, the uterus felt in the hypogastrium contracted in the *ordinary degree*; nevertheless, about twenty minutes afterward, there came on one of the most frightful hæmorrhages I ever witnessed; by the introduction of the hand, and the application of cold it was speedily arrested.”

We would now ask, in what the *peculiarity* of this hæmorrhage consists? As regards ourselves, we are altogether at a loss to conceive—it certainly could not be in the force of the previous circulation, as this is a common event; yet for a flooding to follow this state of arterial excitement is rare; nor can it be from its taking place “about twenty minutes after delivery,” and after “the uterus felt

contracted in the hypogastrium in the ordinary degree;" for this is a very usual occurrence when hæmorrhage happens, as it only requires that the uterus should cease to contract or to relax itself to give rise to a discharge of blood; and every practitioner of any experience has met with the same occurrence, when the labour has not been attended by an exalted action of the arterial system.

Indeed, our own experience would lead us to the conclusion, that hæmorrhage is perhaps less frequent when the system is pretty much excited, than when its action is diminished below the healthy degree; for in this latter state of the system, the uterus generally contracts with less force and certainty than where the pulse may be considered at par, or even above it. And this seems to be proved by the very case related by Dr. G. as there was no flooding immediately after delivery; a period at which it must be supposed that the circulation is more active than it will be twenty minutes after; but at about this period, (of twenty minutes,) the flooding in Dr. G.'s patient commenced and became formidable. Here we must remark that this case is carelessly related—for Dr. G. does not say a word about the condition of the uterus at the moment, though he particularized its condition immediately before. It is true that Dr. G. mentions afterward, that the "uterus which had become firm and distinct, became so soft it could no longer be felt;" but in doing this he effectually destroys the whole *peculiarity* of his case. For in confessing that the uterus relaxed itself, he at once makes the case an ordinary instance of flooding—one that is met with every day. For had the uterus remained contracted during the flooding, as was the case twenty minutes previously, there might have been some cause for wonder, and would have enabled Dr. G. to make out a case of a "*peculiar form of hæmorrhage.*"

We would ask, has not every practitioner witnessed this condition or disposition of the uterus to contract and relax, and this for some time after delivery, and thus giving rise to a renewal and suspension of the flooding? and this where there was no arterial excitement to enable us to account for it on the principles of Dr. G. or to put it in our power to declare that the form of hæmorrhage was peculiar? And it is also known to every accoucheur, that when this disposition of the uterus exists, there is always alternate hæmorrhage and its suspension to a greater or less extent, or in proportion to the degree of contraction and relaxation of the uterus, and this without any necessary correspondence of condition of arterial circulation? If this be so, and who will dispute it? wherein does the *peculiarity* of Dr. G.'s case of flooding consist! Does not the very declarations of Dr. G.

prove, that nothing but the most common form of hæmorrhage was present? Does he not say, that while the uterus was contracted, and this for the space of twenty minutes, there was no flooding? But at the end of this time, he informs us that "the most frightful hæmorrhage came on that he ever witnessed!"

To this lady, Dr. G. was called a second and a third time. In the second, he informs us that the same state of the arterial system was present—she was soon after his arrival delivered; the child was expelled slowly, indeed he says "it could not be expelled more gradually." He cut the cord, and placed his hand upon the abdomen and felt the uterus contracting in the usual degree; yet a few minutes afterwards the blood burst out with prodigious impetuosity. But by the introduction of the hand and the application of cold the hæmorrhage was arrested, but not before it "bleached the face of his patient, and caused her to faint for many days, when she attempted to sit up."

In this case who can perceive any thing more than a common uterine hæmorrhage, and its consequences? But who will not perceive a want of practical tact in its management—for in this case the hæmorrhage would have ceased immediately, had frictions upon the abdomen been instituted.

Upon these cases Dr. G. makes the following remarks:—

"I had now witnessed two labours in the same person, in which, though the uterus contracted in the ordinary degree, profuse hæmorrhage had nevertheless occurred; let me be understood—after the birth of the child, I laid my hand upon the abdomen and felt the uterus within, of that size and hardness which is generally unattended by hæmorrhage; in both instances the labour had been attended by an excessively full and rapid circulation. I could easily understand that a contraction of the uterus, which would preclude hæmorrhage in the ordinary state of the circulation, might be insufficient to prevent it during this violent action of the blood-vessels, and the inference I drew was, that in this case the hæmorrhage depended not on want of contraction of the uterus, but on want of tranquillity of the circulation, and that, if ever she became pregnant again, a mode of treatment which would cause her to fall in labour with a cool skin and a quiet pulse, would be the best means of preventing a recurrence of the accident."

In this quotation it will be perceived, that Dr. G. wishes to establish a principle, which we think unfounded in fact, as well as highly dangerous in tendency. *It is unfounded in fact;* because there never was an instance of hæmorrhage proceeding from merely an increased circulation, and in defiance of contraction—for, though we admit without hesitation, that a very active state of the arterial system may very much augment a flooding, yet we will deny that it will

cause one, independently of an uncontracted state of the uterus; for it is altogether impossible for arterial action, however exalted, as we have already observed, to overcome uterine contraction, when this is exerted in a sufficient degree to prevent a too abundant discharge of blood under ordinary circumstances. Or in other words, that when the uterus contracts with a force that would prevent hæmorrhage under the common condition of the system, that an exalted circulation will not alone produce this discharge in a degree that would constitute an hæmorrhage; though this discharge may be rather more abundant than it would be under the usual state of circulation—and consequently, that a hurried circulation will not alone produce a flooding; and therefore the hypothesis of Dr. G. "that it is reasonable to suppose that if the force of the circulation was extraordinarily great, it will be able to overcome the ordinary closure of the orifices," is without foundation. And we must therefore repeat, that Dr. G. is altogether wrong, when he asserts that the floodings in the patient whose case is related, was not owing "to a want of contraction of the uterus, but to the want of tranquillity of the circulation." *It is highly dangerous in its tendency*—because it diverts the attention of the practitioner from the only proper and safe mode of treating an hæmorrhage from the uterus, by diminishing our confidence in the efficacy of uterine contraction; and thus makes us neglect the best means of promoting it; and by it, securing the patient from danger. Besides, Dr. G. is at variance with himself when at the bed-side; for he recommends the application of the fist to the inside of the uterus, which can only do good by inducing contraction.

We have already remarked upon the vague manner in which uterine contraction is mentioned, and the entire impossibility of conveying a correct notion of the state of the uterus, by saying, that this organ "was contracted to a degree that generally indicates security;" "that it was contracted in the ordinary degree;" "he seldom found it more contracted so soon after delivery," &c.; for the expressions give no definite idea of the degree to which the uterus has reduced itself—the degree of contraction should alone be determined by the effect it has upon the discharge of blood. For if an inordinate degree be prevented, then the uterus may be said to be properly contracted, and not until then; for we must only judge of the degree by its influence upon the bleeding vessels. But above all, it should never be lost sight of, that the uterus may relax itself in a moment, after it has been successfully contracted; and it is owing to this contingency that the floodings recorded by Dr. G. took their rise, and not to the power of *a vis a tergo* overcoming the tonic contraction of the uterus; and

this by the by Dr. G. acknowledges, without having perceived that it effectually destroyed all claim in his cases to peculiarity; for he says, that "the uterus, which had become firm and distinct, became so soft, that it could no longer be felt."

Now, after this admission, will any one seek for the origin of these floodings, in the hypothetical assumption, that they were not caused by the want of uterine contraction, but by the force of circulation? And especially, as it must be familiar to every practitioner, that a relaxed state of the uterus, with a separated placenta, will always give rise to the most alarming floodings; and this, even under the most moderate "force of circulation;" we must therefore declare, that Dr. G. has at least admitted more causes than were sufficient to account for the phenomena—for the relaxed condition of the uterus alone was every way sufficient to this end.

But notwithstanding, Dr. G. attempts to prove a new cause of uterine hæmorrhage; namely, a rapid circulation; and his denying the efficacy of uterine contraction to prevent it, it can be easily shown, that in each instance he has brought forward to support his doctrine, his success in arresting the flooding was owing to the uterus recovering its contractile power, and in no instance to the abated force of the circulation.

In the first case the hæmorrhage was alarming; but "by the introduction of the hand, and the application of cold, the hæmorrhage was speedily suppressed." Now we will ask whether the introduction of the hand into the cavity of the uterus was calculated to abate arterial action, and thus remove the cause of the bleeding? We are every way certain, that this question will be answered in the negative, yet the means were successful—how did they act then, to produce this desirable end? Simply by stimulating the uterus to contraction; and this was also promoted by the stimulus of cold. Why did not Dr. G. employ blood-letting, digitalis, nitre, or some other agent whose operation is to diminish "the force of circulation?" No, he depended, in spite of his theory, upon the well-known, old-fashioned, and efficacious stimulation of the uterus.

The second instance was attended by a similar discharge of blood, and was relieved precisely by the same means. Having witnessed two labours accompanied by exhausting floodings, he was determined upon the next occasion to adopt "a mode of treatment which would cause his patient to fall in labour with a cool skin and a quiet pulse." And he informs us, "it was not very long before he had an opportunity of trying the truth of his doctrines; (namely, that hæmorrhage is not owing to the absence of the contraction of the uterus, but to a

want of tranquillity of the circulation,) and the efficacy of his treatment, for about twelve months after her last confinement, she, (the former patient,) called on him to tell him she would require his attendance again."

With the notions he wished to establish in view, he says—

"The plan I advised was this; to avoid fermented liquors; (and pray why not distilled!) to take *meat only thrice* a week; (a goodly provision,) a purgative of salts and senna twice a week; a scruple of nitre three times a day; this she began two months before she expected to be confined, and continued it up to the full time. I saw her when she was expecting her labour every hour, and had the satisfaction to find her with a cool skin, and a soft pulse under 80. She was to lie-in at her own house, a few miles from town; I was to attend her there; for fear I should not arrive in time, the neighbouring surgeon was to be in the house. I was sent for four days afterwards; when I arrived she was not delivered; but I was mortified to find, that since our last interview, her pulse had sprung up, and there was now the old heated skin and hurried circulation, though in a far less degree, and this the surgeon said had been the case for two days. The labour came on, the child was gradually expelled, and after the placenta had separated and was removed, the surgeon had put his hand on the abdomen, and said he had seldom felt the uterus more contracted so soon after delivery; yet within a few minutes there came on a flooding; like what I believed to be the cause, it was trifling to what I had formerly witnessed, and was readily suppressed by a cold, wet napkin flapped upon the belly; but it was enough to produce syncope, and detain us in the house several hours longer than we should have otherwise have remained."

In this case, Dr. G. depended upon the *ipse dixit* of the surgeon, instead of examining himself into the condition of the uterus—the surgeon may have been inexperienced, or, as is too often the case, may have been careless, as regards the state of this organ. But, if we admit the statement to be true, that it was more than usually contracted for the period, it must be acknowledged that things did not remain long in this posture, for we are informed, that within a few minutes a flooding came on; and though this was comparatively trifling, *yet it was sufficient to produce syncope*, and to detain both Dr. G. and the surgeon several hours longer than was usual upon common occasions. In this history, we have every reason to believe that soon after the delivery of the child, the uterus contracted sufficiently to prevent hæmorrhage, as it is declared, that this did not occur for some minutes after it was ascertained by the surgeon that this was the condition of the womb. Now, if uterine contraction prevented for a time the loss of blood, it is every way probable, that, *cæteris paribus*, it would have continued to have done so for any longer period, had the contraction preserved itself—but this was not the case, as an alarming flooding came on, and put the life of the patient

ia jeopardy; for we must insist, that life is always threatened, when flooding produces syncope, though when compared with former occasions, it may have been comparatively trifling.

Now, is it not more than probable, that the uterus relaxed itself, and thus gave rise to the hæmorrhage? If this be answered in the affirmative, it may be demanded, what gave rise to the relaxation? Dr. G. would answer, a rapid circulation—but this alone, we still insist, can have no mechanical agency to produce this effect, as insisted on by Dr. G. and the only answer that can be given, is to state the fact, that this relaxation frequently takes place, though it may have been preceded by efficient contraction; and also, that contraction may again quickly follow this relaxation; and this without our being able to decide upon its cause; though we may be certain, that the state of the circulation had not the slightest agency in its production. Indeed, the very means Dr. G. employed to arrest it, seems to prove that the uterus had relaxed itself—for *slapping* the belly with a cold, wet napkin could act in no other way, than stimulating the bleeding organ to contraction. And we further believe, that no hæmorrhage can take place, but when the uterus is inadequately contracted; and that the loss of blood will always be in proportion to the absence of contraction, and the size of surface exposed by the separation of the placenta.

Dr. G. says—

"In process of time she became, (the same patient,) pregnant again. She pursued the same plan, with only this addition, that when come within a fortnight of her confinement, she had twelve ounces of blood taken from the arm, and a few days before delivery, eight ounces more. She fell in labour, and as soon as I entered the room, the first thing I did was to feel her pulse; it was as soft and as slow as I could wish. After the birth of the child, and the removal of the placenta, the uterus contracted not more than in her last labour, but not the smallest degree of flooding or faintness took place."

We really congratulate Dr. G. upon the success attending this last case, though we are far from believing that it depended upon the more tranquil disposition of the circulation; for this was only a sign of the more normal condition of the system at large. We believe this, because the excited state of the heart and arteries is an unnatural condition of the system in general, and the want of disposition to contract in the uterus, was the result of this morbid excitement; for when the tune of the circulating apparatus was diminished, the uterus, like the other portions of the muscular system, participated in its reduction, and healthy contraction took place.

We attribute much of the benefit which the patient derived from

a reduction of the system, to a loss of blood, which should have been the remedy in all these cases, and which, had it been employed, would most probably have been followed by the same good effect. But Dr. G. does not seem to attach equal consequence to this remedy—it is mentioned only as one of the means pursued, but not insisted on as an important auxiliary; whereas we attribute much to its agency; not by removing the excitement of the circulating system itself, but by destroying the disease, of which this was only a symptom. For we still maintain, that mere arterial vigour is incapable of producing haemorrhage from the uterus, after the manner declared by Dr. G.; namely, by overcoming uterine contraction; and we must still insist, that there was in this patient some peculiar operating cause which gave rise to arterial action, and at the same time unfortunately, impaired the contractile power of the uterus itself. For had the latter remained uninjured, the former would have been of no consequence—or in other words, would have been insufficient alone to have produced flooding.

Now, this want of disposition in the uterus to contract with sufficient energy and permanency, is very frequently met with, though unaccompanied by high arterial action—this is notorious to every practitioner—in such cases, to what shall we attribute this failure of healthy uterine action? certainly not to a too excited state of the heart and arteries—for we have many times witnessed this failure in the uterus, when it could not possibly be attributed to this cause. But on the contrary, we never more fear an absence of this power, than when the pulse is very weak. The conclusion then is irresistible, that the tonic power of the uterus may be impaired by two very opposite conditions of the circulating system, though the mode of their effecting this be entirely unknown to us. At all events, it cannot be attributed in both instances to the mechanical one suggested by Dr. G. though in both precisely the same condition of the uterus existed—namely, a want of “tonic power,” and this was all. For had Dr. G. instituted frictions upon the abdomen, he would have found that the uterus would have been obedient to their influence, and he would have been saved the necessity of introducing the hand into the uterus, and the patient would have been spared much of her blood.

For at last, as we have remarked above, the haemorrhage was only arrested by forcing the uterus to contraction, and not by the reduction of arterial force; which, were Dr. G.’s hypothesis well founded, would alone have been successful. We may however remark, *en passant*, that had Dr. G. abstracted a few ounces of blood from his

patient's arm when he found her under such high arterial excitement, he would have shown himself a more careful and judicious practitioner than he has done, and his patient would have profited largely by the remedy—not, however, simply because the arterial force would have been abated, for that was only a sign of the condition of the body, but because it might, and most probably would, have removed the condition of the system which gave rise to this excitement, and which was also the cause of the indisposition of the uterus to maintain its contraction, after it had once taken place—for be it remembered that in each instance, the uterus had contracted after delivery, during which time there was no flooding; and in each instance confessedly, it became relaxed and gave rise to hæmorrhagy.

The condition of the heart and arteries described by Dr. G. is far from being common as a constitutional peculiarity, for such it evidently was with his patient; for we every now and then meet with cases of accidental disturbance, without its being attended with any untoward circumstance. It may therefore be looked upon as rare; so rare, indeed, as to make it unsafe to form a rule upon, (as it would only be the exception,) did its treatment require a departure from the common and well-established routine for the management of uterine hæmorrhage. For though Dr. G. seems to manifest an anxiety to render his case remarkable, yet in their management he has not departed from the most common, (but perhaps not the best,) mode of treatment, as we have had occasion before to declare—nay, he neglected one of the most obvious, as well as the most certain remedies in such cases within our reach; namely, blood-letting.

Dr. G. himself seems to be rather doubtful of the importance of his cases, since he dismisses them without attempting to draw from them any conclusion of real practical utility, or even of novelty. He concludes their history with the utmost sang froid, in the following words; “how often a disturbance of circulation plays an important part in uterine hæmorrhage, it is difficult for an individual to know; but *I suspect* sufficiently often to deserve the especial attention of practitioners. I advise them when they meet with patients subject to hæmorrhage after delivery, to notice the state of the circulation before labour, and if disturbed, to employ means to tranquillize it before labour comes on.” From this statement, it would seem that this occurrence, by Dr. G.'s own confession, is rare; since he has the reputation of having been largely employed in obstetrical practice, yet he assures us it is difficult for an individual to know how often a disturbance of circulation may play an important part in uterine hæmorrhage. If we take the cases related by Dr. G. for the extent

of his experience in such cases, (and he mentions no more,) this "peculiar form of hæmorrhage" was confined to a single individual—an experience altogether insufficient to establish any important or even safe practical rules, did such cases require a departure from those which have governed practitioners in the treatment of uterine hæmorrhage for nearly a century.

Now, we must repeat, that Dr. G. did not attempt, nor does he propose any novelty in the management of such cases—he only followed the long beaten track. Nor did he, in our opinion, even fulfil the expectations we had of him as a judicious and enterprising practitioner—for he neglected to put in practice the most obvious and important remedies against such a state of the system as he describes. In the three first pregnancies he witnessed in this patient, he literally did nothing—or at least nothing efficient. He neglected blood-letting altogether, he did not enforce a strict antiphlogistic regimen,* nor did he command rest—all of which would be looked upon as essential to the reduction of such a state of the circulation as he describes. In the fourth, it may be difficult to decide whether the observance of the rules laid down by Dr. G. were the cause of the difference of result, or whether the peculiarity of this lady's constitution may have ceased to exist at this time—as regards ourselves, we are disposed to believe that the two bleedings practised before delivery had saved the woman from a fourth flooding; for these are all we can speak of, as the history of the first labour is not related.

His directions for the treatment of uterine hæmorrhage, to say the least, are very hypothetical, and very far, in our estimation, from being the best. But upon this point we will let Dr. G. speak for himself. He says, "my belief is, that when hæmorrhage occurs after the separation of the placenta, the quickest way to stop it, is to introduce the left hand closed within the uterus, apply the right hand open to the outside of the abdomen, and then between the two to compress the part where the placenta was attached, and from which *chiefly* the blood is flowing."

It should ever be considered as a valuable rule in practice to ex-

* Indeed, Dr. G. does not appear to have had any precise notions of the nature of the affection he describes, or at least of its mode of treatment; for he advises "during labour, to use cordials sparingly!" Cordials, under such a condition of the system, in any quantity, in this country, would be looked upon as highly pernicious.

† We would ask for information, whether Dr. G. or any body else, ever knew blood to proceed from any other portion of the uterus, in uterine hæmorrhage, than that which was occupied by the placenta.

cite as little unnecessary alarm as possible; for nothing can justify any degree of it, but the most absolute necessity—therefore, the introduction of the hand within the uterus, should always be left as a dernier resource, and only after less harsh and appalling means have proved unsuccessful. Of this kind are frictions upon the abdomen, and the exhibition of the secale cornutum; for we believe that even the first of these means, if duly and properly applied, will succeed in rousing the uterus to contraction—certainly so far we have never known it to fail. And the secale cornutum is now almost universally considered as a powerful adjuvant, if not absolutely successful in itself. Now, the first of these remedies is always at hand, and the second can certainly be commanded without much loss of time; therefore let these be tried before we proceed to the oftentimes unnecessary, and always frightful, expedient of introducing the hand within the uterus. We can with most perfect truth declare, we have not found it necessary to introduce the hand, for the purpose of stopping an hæmorrhage after the expulsion of the placenta, for more than the last five and thirty years of our practice.

Dr. G. proceeds to say, “*by directing the hand to the very vessels from which it (the blood) issues, and compressing them as directed, a quantity of blood is saved. If I may judge from my feelings, the blood stops, in a great degree, even before the uterus contracts; the hand acts first as a tourniquet, then as a stimulant.*”

To this plan we would offer the following objections: first, the hand cannot, with any possible certainty, be directed exactly to the bleeding vessels, as the placenta has no certain location. Of this, Dr. G. was aware, and has attempted to remove this difficulty, but altogether unsuccessfully in our opinion. Secondly, that if the knuckles were applied to the part from which the placenta was detached, they could not, from the unequal surface which they naturally present, press upon all the bleeding vessels immediately beneath them. And thirdly, because no hand, unless it were one of monstrous size, would be equal to the surface exposed by the separated placenta. Therefore, the hand when introduced into the uterus so as to stop an hæmorrhage, can only act as a stimulant, though Dr. G. in trusting to his feelings, inclines to the belief, that “*the blood stops in a great degree, even before the uterus contracts.*” Now this, from the

* If this ever happened, it could only have been when the woman was much exhausted, and the last effort was made by nature to preserve the individual, by producing coagulation. In this case, nature stopped the bleeding, and not the knuckles of the accoucheur. Besides, in such cases, Dr. G. should have appealed to reason and experience, and have totally distrusted feeling.

very nature of things, cannot be. Besides, we may well ask, how the hand within the uterus can act as a *tourniquet*! we cannot comprehend this.

From an attentive perusal of Dr. G's chapter on "a peculiar form of uterine haemorrhage," we are led to the conclusions, first, that in the cases he has described, there was no unusual circumstance connected with the flooding to entitle it to be called "peculiar." Second, that an attempt at originality, misled him in his practical means, as they were neither the best that could have been devised, nor the most happily executed. Thirdly, that we cannot perceive in the histories of the several cases, the slightest deviations from the ordinary uterine haemorrhage, if we except the active condition of the circulation, which *perhaps* may have produced the indisposition to contract in a uterus, in every other respect healthy. Fourthly, that in each instance the haemorrhage was arrested by the agents generally employed for this purpose. Fifthly, in attempting something *new*, he had been made to overlook every thing that was *old* and *common*; or rather to view every thing that was *old and common* in a new light, and this without a profitable end; even perhaps, with dangerous innovation.

W. P. D.

ART. XV. *De L'Influence de L'Estomac sur la Production de L'Apoplexie, d'après les Principes de la Nouvelle Doctrine Physiologique.*
S. e. Par L. J. R. A. RICHOND, Doct. en Med. &c. 8vo. pp. 164.
Paris, 1826.

TO LALLEMAND we are indebted for the best pathology of the brain. The critical acumen and spirit of analysis with which he has examined the recorded cases of cerebral disease, as well as such as fell under his own observation, have enabled him to deduce a body of doctrine which has placed this branch of pathology far in advance of its previous condition, and worthy of being ranked among the most remarkable results of the physiological medicine. Among other things, we are especially indebted to him for having first pointed out the actual condition of the brain in apoplexy, convulsive, and paralytic affections. He has shown that these affections arise, in a great majority of instances, from an inflammatory irritation, and has thus given to their attendant symptoms their true physiological importance, by rallying them under the general effects of irritation and its consequences. Richond, the author of the work before us, has advanced